

Other Fabric Structures

Architects, engineers and building owners are turning increasingly to fabric structures because of their aesthetic appeal, relatively low initial cost, low maintenance outlays, energy efficiency and good space utilization. Fabric structures are built in two basic ways: some are tension structures supported by a network of cables and pylons, others are supported by air pressure within an enclosed fabric envelope. The photos on these pages exemplify one structure of each type whose roof is made of Owens-Corning's STRUCTO-FAB Fiberglass fabric.

The photos below and at upper right show exterior and interior views of the African Pavilion at the North

Carolina Zoological Park in Asheboro, a tension structure. The recently completed pavilion will be home to more than 200 animals representing 25 species. It also houses native African plants; the translucent fabric transmits sufficient natural light to sustain plant life. The STRUCTO-FAB roof encloses four distinct animal habitats in a single 46,000 square foot structure.

The photo at far right shows the air-supported Stadium at B.C. Place, Vancouver, British Columbia, Canada's first covered stadium. Seating up to 60,000, the stadium is a multipurpose sports area, exhibition center, convention facility, concert hall and entertainment amphitheater. The 10-acre STRUCTO-FAB roof, shown at right below during the construction phase, weighs only 1/30th as much as a conventional roof of that size. Sixteen giant fans blow air into the balloon-like envelope between the roof's outer membrane and its inner liner, automatically maintaining the pressure differential necessary for roof rigidity.



